

Snapshots

Successes of BLM hazardous fuels projects ...

California

Fuels Management Program Helps Prevent Potentially Catastrophic Wildfire

Public land within much of BLM's Ukiah Field Office is characteristic of the California interior coastal mountain range. The terrain is steep and mountainous with elevations varying from 1,000 to 4,500 feet. California chaparral is found throughout the area and is one of the most fire susceptible vegetative types in the world.



The 2001 arson fire scar can be seen at the center of this photo. Note the handline above the fire area that contained the fire. The larger dozer line was put in as a precaution that wasn't needed thanks to the reduced fuels.

In the summer of 1960, an arson fire was set in the Mill Creek drainage adjacent to the public lands of Cow Mountain. Thousands of acres were burned. After twenty years, the vegetation had regrown and local stakeholders began voicing concerns that the volatile conditions were ripe again for another catastrophic fire. BLM worked cooperatively with these stakeholders to establish and prioritize fuels management units within the 60,000 acre Cow Mountain Recreation Area, including a prescribed burn plan scheduled for implementation in the fall of 1981.

However, in August of 1981, an arsonist set another fire in the Mill Creek drainage. With summer temperatures exceeding 100 degrees, the fire raced over the same path it took in 1960. By the time the fire was contained, over 26,000 acres had burned, including 35 structures, a number of which were residential homes. The fire suppression and rehabilitation costs exceeded \$2 million.

Fuel reduction efforts were continued with lessons learned from these two arson fires. By the mid 1990's, not only had the chaparral regrown in the previous fire scar but also there had been a substantial increase in residential development along the wildland urban interface. In the fall of 1997, BLM and the California Department of Forestry and Fire

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Protection (CDF) cooperatively implemented a prescribed burn within the Mill Creek drainage. The primary objective for doing the burn was to break up the continuity of the maturing chaparral. Should another fire then occur, the fuel loadings would be such that the fire could be readily suppressed before it had the chance to become another major inferno.

In July of 2001, an arsonist once again set a fire within the same drainage. Air temperatures again exceeded 100 degree Fahrenheit. Other similarities to the two previous fires included approximately 20 years of vegetation regrowth, fire location, fire weather, and availability of CDF initial attack resources. One extremely noteworthy change to the area was the reduced fuel loading brought about by the 1997 prescribed burn. As CDF responded to the fire, it became apparent that the outcome would also be significantly different from that experienced in 1960 and 1981. Fewer fuels on the landscape meant substantially less fire intensity and rate of spread of the wildfire. The wildfire was controlled at less than 10 acres. The end result was a considerable savings in terms of potential damage to public and private resources as well as fire suppression and rehabilitation costs.

The benefit of the fuels reduction work completed in the area prior to the fire cannot be underestimated. Minimal resources were needed to control the blaze, little or no rehabilitation was required, and no homes or lives were lost. Although there is still more to do in order to reduce the fire hazard on public land within the Ukiah Field Office, private, county and state cooperators continue to be very supportive of the fuel management program.

Contact: Jim Dawson, Fire Management Officer, BLM Ukiah Field Office, (707) 468-4079

Rare Plant Ecosystem To Benefit From Prescribed Fire

Ash Valley, located in Northwestern California near the town of Madeline, has been designated an Area of Critical Environmental Concern, in part due to the rare plants that grow only there. In an effort to maintain this ecosystem in a healthy condition, fire is being re-introduced.

BLM's Alturas Field Office fire management and range conservation staffs are working together to on the Ash Valley Prescribed Burn Project to accomplish maintenance goals. These are reduction of hazardous



One of the sensitive species of the Ash Valley area, Astragalus anxius.

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and overgrown fuels in the area to improve the habitat, and to conduct research on the affects of planned low intensity underburns on the rare plants.

The project began in July 2002, with study plots and transects being established to examine conditions prior to the prescribed burns. These same plots will be studied again immediately following the burns as well as in the months and years that follow. BLM's range conservationist and lead researcher, Mike Dolan, hopes to publish the results and enter them into the Fire Effects Information System so that others can benefit from the research being conducted.



Ivesia: Ivesia paniculata grows only in the Ash Valley area and is one of five rare plants to be studied during this project.



Crews are trimming ladder fuels in preparation for the upcoming prescribed burn.

The burn plan is expected to be in prescription this fall. It is intended to reduce fuel loading and stimulate forbs production by consuming the brush and duff in the sagebrush/juniper/ Jeffrey pine ecosystem. The burn will be done by the Alturas prescribed fire/fuels module and will cover approximately 20 acres.

Contact: Jerry Wheeler, Acting Fire Management Officer, Alturas Field Office, (530) 233-4666

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Goats were used for maintenance along 3 miles of the Mule Town Fuel Break.

Four-Legged Fuels Force

Creation of fuel breaks is a common method used to slow or stop wildland fires. Five years ago the Mule Town fuel break was completed near Igo, California in an effort to protect the community.

Fuel breaks are as dynamic as the wildlands they're cut into – they require maintenance in order to remain effective. In five years, considerable brush and tree sprouts had begun to re-vegetate the Mule Town fire

break, compromising its original effectiveness. BLM's Redding Field Office began considering various maintenance options including use of herbicides and burning. The risks and negative side effects of these methods led to another option – a herd of hungry goats!

In May 2002, 650 goats were contracted to eat their way through 40 acres of regrowth spread along 3 miles of fuel break. They ate the fine fuels such as grass, dead pine needles and leaves as well as the larger re-sprouting vegetation like manzanita, small trees, and blackberry bushes. They even ate poison oak and non-native noxious weeds such as star thistle. They also consumed the lower limbs of larger trees, reducing ladder fuels and mimicking the effects of fire pruning.

The use of goats for this maintenance effort was a total success. The fuel break has been re-thinned with little or no risks associated with burning. There were no worries about smoke, fire escape, patrolling, ordering resources, weather, air quality, lengthy burn planning process, or the potential of killing residual trees within the fuel break.



The goats clearing efforts are nearly complete.

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Goats have proven their ability on this project. As a result, its expected that the goats will return for use on adjacent fuel breaks next year!

Contact: Walter Herzog, Fire Management Officer, Redding Field Office, (530) 224-2124

Goats eating their way through toyon bushes.

Cooperation & Coordination Leading to a Safer Community

BLM's Surprise Field Office Fire staff is assisting in an on-going cooperative wildland-urban interface project to construct and maintain a series of fuel breaks on the Fort Bidwell Indian Reservation above the town of Fort Bidwell in extreme northeastern California near the Oregon and Nevada border. It is home to approximately 300 people.

Heavy fuels that surround the community culminated in a partnership between the BLM, the tribe, and the Bureau of Indian Affairs. Creation of fuel breaks and buffers between the wildlands and the community has been a long-time goal of the partnership. The 100 to 150 foot wide fuel breaks will help slow or stop an approaching wildfire and provide a defensible space and anchor points



Heavy fuels to the right, fuel break in the middle, property to be protected to the left of the photo.

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for suppression crews in the event of a wildfire. BLM provides direct protection and suppression resources to this area and expects that pre-fire mitigation projects such as this fuel break will help protect the community and the surrounding public lands from wildfire.

During the summer of 2002, the BLM fuels module is assisting the BIA crews maintain the existing fuel break on the eastern side of the community while also constructing as new fuel break on the south boundary.

Contact: Garth Jeffers, Fire Management Officer, Surprise Field Office, (530) 279-2729



A section of fuel break climbs the hill around the community of Ft. Bidwell.



Section of fuel break before maintenance project. Fuels crew about to begin clearing of the fine fuels that could carry a wildfire.



Section of fuel break after maintenance project.

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